Kazakova, Ye. B.

Reactions of alcohols and ketones with pentaborane. A. F. Zhigach, E. N. Kazakova, and R. A. Kigel. *Proc. Acad. Sci. U.S.S.R., Sect. Chem.* 106, 9-11 (1956) (Engl.)
See C.A. 50, 13736.

KAZAKOVA, YE. B.

USSR/ Chemistry - Reaction processes

Card 1/2 Pub. 22 - 18/43

Authors : Zhigach, A. F.; Kazakova, Ye. B.; Kigel', R. A.

Title : Reaction of alcohols and ketones with pentaborane

Periodical : Dok. AN SSSR 106/1, 69-71, Jan 1, 1956

Abstract : The reactions between methyl, ethyl and butyl alcohols and acetones with pentaborane are described. It was established experimentally that the reaction of alcohols with pentaborane is followed by the formation of intermediate compounds (alkoxy borines). The effect of small amounts of dehydrated alcohols on pentaborane causes partial separation of H. Later addition of alcohol results in additional separation of H. The H separatior

Institution : .....

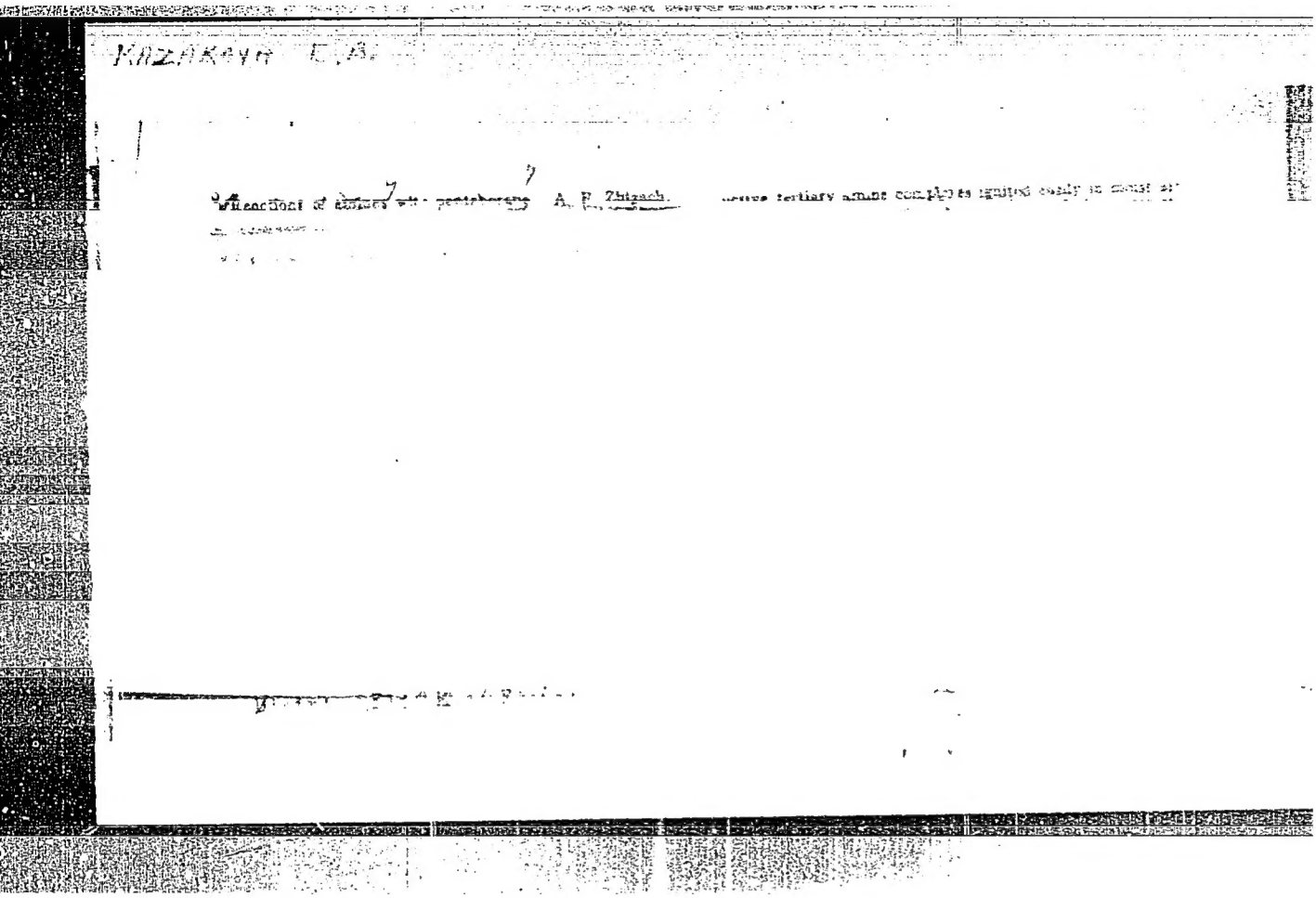
Presented by: Academician A. N. Nesmeyanov, July 11, 1955

Card 2/2 Pub. 22 - 18/43

Periodical : Dok. AN SSSR 106/1, 69-71, Jan 1, 1956

Abstract : stopped only after the addition of 15 mol. of alcohol to 1 mole of pentaborane. The formation of boric acid esters (borate) and separation of twelve H-molecules were found to be the final reaction results. Nine references: 1 USSR, 7 USA and 1 Germ. (1878-1953). Drawing.

N,N',N''-Triethylborazole. A. P. Zhirach, B. B. Kuznetsova, and B. S. Kronstadt (Inst. Hetero-org. Compds., Acad. Sci. U.S.S.R., Moscow). *Doklady Akad. Nauk S.S.S.R.* 111, 1029–30(1956); *cf.* Schlesinger, *et al.*, *C.A.* 30, 4421.—Passage of 1 mole NH_3 into 1 mole Et_3B gave $Et_3B.NH_3$, m_{28} 65°, which (120 g.) was placed in an autoclave, pressurized briefly with dry H, the pressure was released, and the autoclave gradually heated over 5.5 hrs. to 450° (50 atm. internal pressure being developed). After constant pressure had been established the vessel was cooled to 20°, depressurized, and blown with N_2, yielding 48 g. crude product (higher or lower temps. gave poorer yield) which after distn. gave 70% title compd., b_{7-8} 66–7°, d_{20} 0.866, m. −54°, viscosity at 20° 1.48 centistokes. It does not react with H_2O at room temp. but is slowly hydrolyzed by hot aq. HCl. It decomp. at 100° at atm. pressure and is sol. in org. solvents. G. M. Kosolapoff



KAZAKOV E.A.

A. P. Zhitsch.

5(1) SOV/64-59-2-7/23

AUTHORS: Zhigach, A. F., Antonov, I. S., Kazakova, Ye. B., Frayman, R. S.

TITLE: Continuous Method of Obtaining an Equimolecular Mixture of Ethyl-Aluminum Chlorides (Nepreryvnyy metod polucheniya ekvimolekulyarnoy smesi etilalyuminiykhloridov)

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 2, pp 123-126 (USSR)

ABSTRACT: In contrast with other methods (Ref 1,a), in the present case the reaction between aluminum and ethylchloride (I) was carried out in a mixture of an equimolecular amount of alkyl aluminum halides with the latter serving as catalysts. The metal (or the aluminum alloy) is introduced into the mixture and reacts with a weak solution of (I) so that the process takes place continuously and without danger. In order to determine the influence exercised by various factors on the course of the reaction, experiments were made in glass ampoules which demonstrated (Table 1) that under the given conditions (5 hours, 50-55°) pure (I) reacts neither with aluminum nor with duralumin (DA). By increasing the addition to the catalyst the reaction is accelerated. In this connection the reaction with (DA) (containing 4% copper) takes place more

Card 1/2

rapidly than with Al. Investigations of the technological parameters of the processes showed that it is more favorable to carry out the reaction in the liquid phase than in the gas phase. The experiments with the liquid phase were made in a glass vessel ($100\ cm^3$) (Fig 1) in the laboratory. The (DA) - splinters were introduced into an equimolecular mixture of bromides (6g) and (I) was introduced into the vessel from below. The reaction temperature was controlled by the velocity of passage of (I) and a heating jacket. The experimental results obtained were examined in a larger reaction column ($700\ cm^3$) and compared to each other (Table 2). A reaction column of stainless steel (Fig 2) was used for further experiments in a plant (Fig 3). The reaction product obtained exhibited the following composition: 21,3% Al, 44,1% Cl, 29,0% C_2H_5. The coefficients of efficiency of the test plant are tabulated (Table 3). There are 3 figures, 3 tables, and 3 references.

ANTONOV, I.S.; KAZAKOVA, Ye.B.; KIGEL', R.A.

Determination of phosgene in technical boron trichloride. Zav.lab. 29 no.7:807 '63. (MIRA 16:8)

(Phosgene)

KAZAKOVA, YE. D

S/096/60/000/010/014/022
E194/E135

26.2181

AUTHORS: Petukhov, B.S., Shlykov, Yu.P., Kurayeva, I.V., Kazakova, Ye.D., and Prozorov, V.K.

TITLE: Calculation of Transient Temperature Fields in Multi-Layer Walls with Internal Heat Evolution by the Hydrothermal Analogy Method

PERIODICAL: Teploenergetika, 1960, No 10, p 95

TEXT: The temperature distribution is calculated in two and three layer walls with internal sources of heat, required to determine the temperature gradients during calculation of the strength of assemblies in several types of heat exchange equipment. 2|

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Institute)

Card 1/1

PANOV, Mikhail Aleksandrovich, kandidat sel'skokhozyaystvennykh nauk; KAZAKOVA, Ye.D., redaktor; GUREVICH, M.M., tekhnicheskiy redaktor

[Perennial vegetable crops] Mnogoletnie ovoshchnye kul'tury. Moskva, Gos. izd-vo selkhoz. lit-ry, 1955. 126 p. (MLRA 9:8)
(Perennials) (Vegetable gardening)

DEMUSENKO, Pantelеymon Martynovich, kandidat sel'skokhozyaystvennykh nauk; SUKHAREVA, Tamara Timofeyevna, kandidat sel'skokhozyaystvennykh nauk; KAZAKOVA, Ye.D., redaktor; ZUBRILINA, Z.P., tekhnicheskiy redaktor

[Work practice of vegetable growers at the all-Union Agricultural Exhibition] Iz opyta raboty ovoshchevodov - uchastnikov Vsesoiuznoi Sel'skokhoziaistvennoy Vystavki. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 71 p. (MLRA 9:11)
(Vegetable gardening)

IVANOVA, Yevgeniya Aleksandrovna; MARKOV, V.Ya.; SMOL'YANINOVA, N.K.; KAZAKOVA, Ye.D., red.; VESKOVA, Ye.I., tekhn.red.

[Berries for private garden plots] IAgodnye kul'tury v priusadebnom sadu. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1957. 248 p. (Bibliotechka po sadovodstvu, no.13) (MIRA 10:12)

(Berries)

VOYTOV, P.I., red.; KAZAKOVA, Ye.D., red.; ZUBRILINA, Z.P., tekhn.red.

[Growing vegetables on bottom land] Vyrashchivanie ovoshchei na poimennykh zemliakh. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958. 165 p. (MIRA 12:1)
(Vegetable gardening)

LISIN, Serafim Sergeyevich; KAZAKOVA, Ye.D., red.; PEVZNER, V.I., tekhn. red.

[Forest nurseries] Lesnye pitomniki. Moskva, Gos. izd-vo sel'-khoz. lit-ry, 1961. 255 p. (MIRA 14:8)
(Forest nurseries)

ANTSYSHKIN, S.P.; BOBYLEV, G.V.; GORYACHEV, I.V.; ISACHENKO, Kh.M.; KOVALIN, D.T.; LAVRENT'YEV, V.A.; LITVINOV, I.V.; MUKIN, A.F.; PEREPECHIN, B.M.; PIS'MENNYI, N.R.; REBROVA, G.I.; SERGEYEV, P.A.; SOBINOV, A.M.; FEDOROV, P.F.; FILINOV, N.P.; KHRAMTSOV, N.N.; KAZAKOVA, Ye.D., red.; BALLOD, A.I., tekhn. red.

[Reference book for foresters] Spravochnik lesnichego. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1961. 894 p. (MIRA 14:7)
(Forests and forestry)

NAUMENKO, Ivan Matveyevich; PONOMAREV, Aleksandr Dmitriyevich; KAZAKOVA, Ye.D., red.; BALLOD, A.I., tekhn.red.

[In the forests of Sweden and Norway] V lesakh Shvetsii i Norvegii. Moskva, Gos.izd-vo sel'khoz.lit-ry, zhurnalov i plakatov, 1961. 102 p. (MIRA 14:12)
(Sweden--Forests and forestry)
(Norway--Forests and forestry)

RYZHIKOV, Diomid Pavlovich, kand. sel'khoz. nauk; KAZAKOVA, Ye.D., red.; PEVZNER, V.I., tekhn. red.

[Effect of shelterbelts on the yield of farm crops] Vliianie polezashchitnykh polos na urozhai sel'skokhoziaistvennykh kul'tur. Moskva, Sel'khozizdat, 1963. 205 p. (MIRA 17:1)

(Windbreaks, shelterbelts, etc.)
(Field crops)

ZHURAVLEV, Ivan Iosifovich, doktor sel'skokhoz. nauk; KAZAKOVA, Ye.D., red.; GUREVICH, M.M., tekhn. red.; MAKHOVA,N.N.,tekhn. red.

[Phytopathology] Fitopatologiia. Moskva, Sel'khozizdat, 1963. 279 p. (MIRA 16:12)

(Trees--Diseases and pests)

BESSARABOV, S.F.; SAVEL'YEVA, L.S.; RASTORGUYEV, L.I.; KAZAKOVA, Ye.D., red.; OKOLELOVA, Z.P., tekhn. red.

[Fruit plants in shelterbelt plantations] Plodovye porody v zashchitnykh nasazhdeniiakh. Moskva, Sel'khozizdat, 1963. 102 p. (MIRA 17:1)
(Fruit trees) (Windbreaks, shelterbelts, etc.)
(Berries)

KHMELEV, Aleksandr Dmitriyevich; KAZAKOVA, Ye.D., red.

[Receiving and the determination of the quality of milk and dairy products] Priem i opredelenie kachestva moloka i molochnykh produktov. Izd.2., perer. i dop. Moskva, Kolos, 1965. 151 p. (MIRA 18:10)

KAZAKOVA, YE. M.

Calves

Biochemical and morphological indicators in the blood of calves raised in unheated calf sheds. Sov. zootekh. 7 no. 10, 1 52.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

KAZAKOVA, Ye. M.

Morphological and biochemical composition of blood in calves grown in unheated buildings. E. M. Kazakova (Lithuan. Vet. Acad., Kaunas). *Fiziol. Zhur. S.S.S.R.* 41(10-17(1955).—Calves grown in cold unheated buildings showed lowered concns. of hemoglobin, erythrocytes, leucocytes, albumin, residual N, inorg. P, and Ca. Catalase activity and globulin concn. in the blood were above normal. These results were obtained during the first 3 months of life. Change to pasture conditions in the spring resulted in increase of the lowered factors, the change being greatest in animals grown in unheated buildings during the winter; these animals also showed the greater wt. gain.
G. M. Kosolapoff

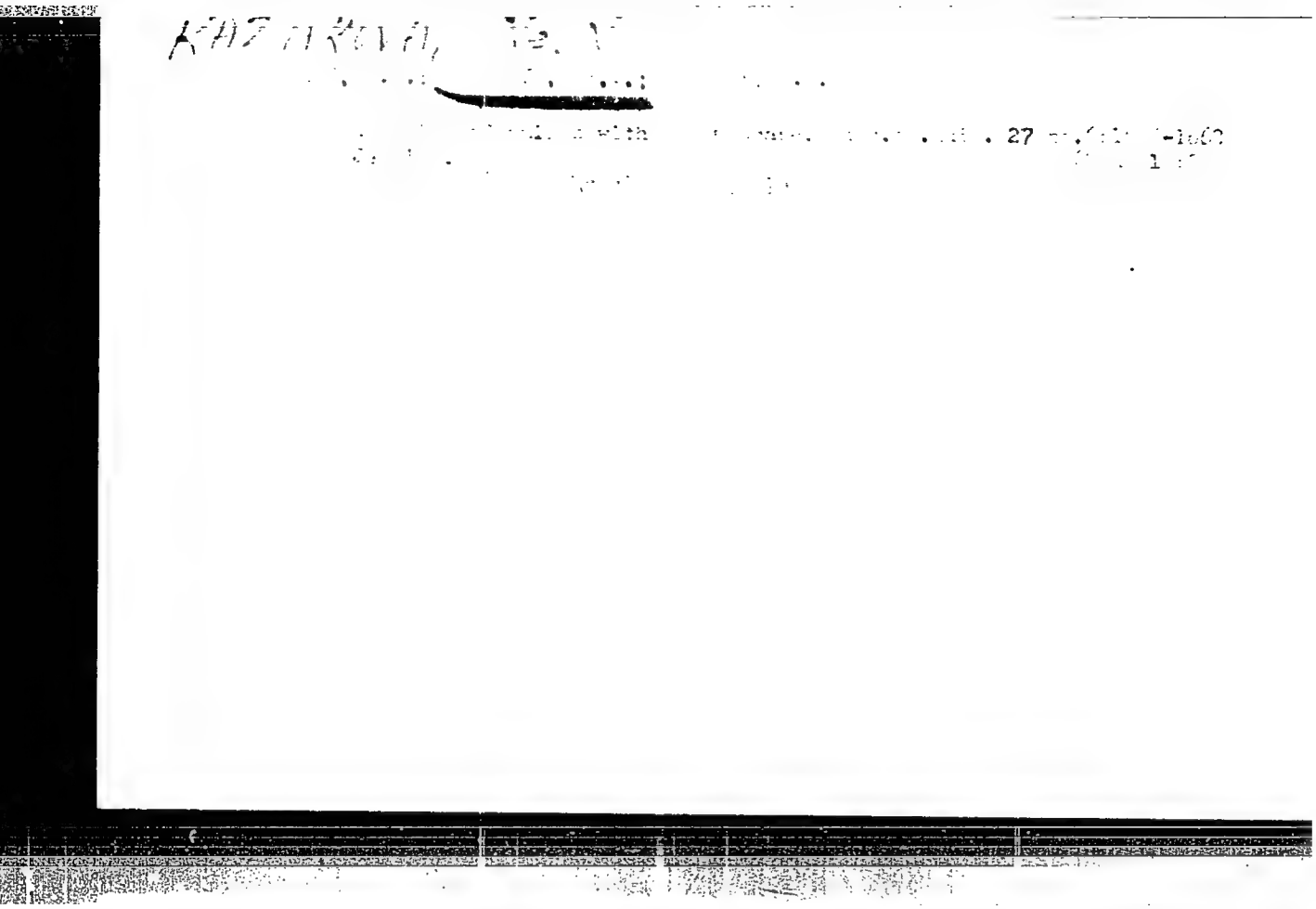
62

Chem Pharmacology
Physiology of Farm Animals

KAZAKOVA, Ye.M., dotsent

Morphological and biochemical composition of the blood in calves raised by the "cold" method. Trudy VIEV 22:272-278 '59.
(MIRA 13:10)

(Lithuania--Calves) (Blood--Examination)
(Cold--Physiological effect)



KAZAKOVA, Z.A.

Methodology of separating fractured reservoir rocks by field geophysical methods. Geofiz. razved. no.9:102-108 '62. (MIRA 15:9)

(Minusinsk Basin--Oil well logging, Electric)

KAZAKOVA, Z.A.; MIKOVA, N.I.

Practice in locating fracture-type reservoir rocks in Jivet sediments of the South Minysinsk Lowland based on the materials of combined field geophysical studies. Trudy VNIGRI no.193:224-243 '62.
(MIRA 15:12)

(Minusinsk Basin--Petroleum geology)

KAZAKOVA, Z.A.

MAKARYCHEV, A.I.; KAZAKOVA, Z.A.

Experimental hypertension of cortical origin. II. Cerebral cortical function in conditioned reflex hypertension. Zhur.vys.nerv.deiat. 4 no.4:537-547 Jl-Ag '54. (MLRA 8:3)

1. Laboratoriya vysshey nervnoy deyatel'nosti Instituta pitaniya AMN SSSR.

(HYPERTENSION, experimental,
cerebral cortical origin)
(CEREBRAL CORTEX, physiology,
exper. hypertension of cortical origin)

KAZAKOVA, N. A., Master Med Sci --(diss) "The role of food albumin in the pathogenesis of experimental hypertension of a cortical origin." Moscow, 1957, 10 pp. (Acad Med Sci USSR), 200 copies (KL, No 41, 1957, p. 107)

Country : USSR
Category : Human and Animal Physiology, Circulation

T

Abs. Jour. : Ref Zhur Biol, No. 2, 1959, No. 8095

Author : Kazakova Z.A.
Institut. : --
Title : The Importance of Dietary Proteins in the Production and Course of Experimental Hypertension in Dogs.

Orig Pub. : Vopr. pitaniya, 1957, 16, No. 4, 8--15

Abstract : Hypertension was produced in dogs by means of stimuli which disturbed the normal course of higher Nervous activity. A steady rise in blood pressure arose in the weak type of dog on a diet low in protein earlier than in controls receiving the usual amount of protein (20%). An excess of protein (33%) in the diet of the strong, excitable type of dog led to a rise in blood pressure later than in the control, but the subsequent course of the hypertension was more serious. Lack of protein in the diets of dogs with permanent hypertension favored depression of the excitability of cortical and subcortical brain centers. Feeding excess protein

Card: 1/2

Inst. Nutrition, AMS USSR

c/c

KAZAKOVA, Z.A.

Fifth session of the Ukrainian Nutritional Research Institute of the Ministry of Public Health of the Ukrainian S.S.R. Vop. pit. 17 no.6:74-78 N-D '58. (MIRA 12:2)
(NUTRITION)

KOROBKINA, G.S.; DINERMAN, A.A.; KAZAKOVA, Z.A.

First session on the problem of "Fat in nutrition." Vop.pit. 17 no.6:79-82 N-D '58. (MIRA 12:2)
(FAT)

RAZUMOV, M.I.; MAKARYCHEV, A.I.; SKIRKO, B.K.; KAZAKOVA, Z.A. (Moskva)

Impairment of carbohydrate metabolism in the central nervous system in dogs in experimental hypertension of cortical oritin; histochemical investigations. Arkh.pat. 22 no.5:26-35 '60. (MIRA 13:9)

1. Iz laboratorii patologicheskoy morfologii (zav. M.I.Razumov) i laboratorii vysshey nervnoy deyatel'nosti (zav. A.I. Makarychev) Instituta pitaniya AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. O.P. Molchanova).

(BRAIN) (GLYCOGEN METABOLISM) (HYPERTENSION) (CONDITIONED RESPONSE)

BRAKSH, T.A.; KAZAKOVA, Z.A.; POPOVA, A.V.; LYUBCHANSKAYA, Z.I.

Role of dietary fat in the development of experimental hypertension. Vop. pit. 22 no.3:22-28 My-Je '63. (MIRA 17:8)

1. Iz laboratorii vysshey nervnoy deyatel'nosti (zav. - prof. A.I. Mordovtsev) Instituta pitaniya AMN SSSR i TSentral'noy nauchno-issledovatel'skoy laboratorii zhirovoy promyshlennosti (zav. - kand. tekhn. nauk A.A. Shmidt), Moskva.

ANDREYENKO, G.V.; KURTSIN', O.Ya.; KOMYAGINA, N.V.; BRAKSH, T.A.; KAZAKOVA, Z.A.; POPOVA, A.V.

Changes in some biochemical indices of the blood during the development of experimental hypertension. Vop. pit. 22 no.5: 22-27 S-O '63. (MIRA 17:1)

1. Iz laboratorii obmena veshchestv (zav. - prof. O.P. Molchanova) i laboratorii fiziologicheskikh funktsiy (zav. - prof. A.I. Mordovtsev) Instituta pitaniya AMN SSSR i laboratorii fiziologii i biokhimii svertyvaniya krovi (zav. - prof. B.A. Kudryashov) Moskovskogo gosudarstvennogo universiteta.

KAZAKOVA, Z. I.

M. Ya. Borodin, Z. I. Kazakova, A. P. Koroleva and V. A. Popov, "The Thermo-resistant and Durable Foamy Materials Based on Silicon-organic Resins."

Report presneted at the Second All-Union Conference on the Chemistry and Practical Application of Silicon-Organic Compounds held in Leningrad from 25-27 September 1958.
Zhurnal prikladnoy khimii, 1959, Nr 1, pp 238-240 (USSR)

KAZAKOVA, Z. I.

PHASE I BOOK EXPLOITATION SOV/4207

Penoplastmassy; sbornik statey (Foam Plastics; Collection of Articles) Moscow, Oborongiz, 1960. 182 p. Errata slip inserted. 5,050 copies printed.

Ed.: A.A. Moiseyev, Candidate of Technical Sciences, V.V. Pavlov, and M.Ya. Borodin; Managing Ed.: A.S. Zaymovskaya, Engineer; Ed. of Publishing House: I.A. Suvorova; Tech. Ed.: V.I. Oreshkina.

PURPOSE: This book is intended for engineers and technicians planning and manufacturing products and structures using lightweight fillers, and for workers of the foam plastic industry.

COVERAGE: The volume contains 13 studies on foam plastics and foaming agents. Some of the studies provide data on the technology of producing foam plastics from polystyrene and polyvinyl chloride, and data on thermosetting polymers (phenol rubber compositions, polyurethane foam, polyepoxy foam, and foam plastic sheets based on organic silicon resins). Other studies contain data on the composition of foam plastics, the effect of technological factors and volumetric weight on the physical, mechanical, and dielectric properties of foam plastics,

Card 1/8

Foam Plastics; Collection of Articles SOV/4207

and on the fields of application of foam plastics. Several studies deal with the production technology of radomes and reflectors for antenna installations in aircraft units. It is stated in the foreword that the Soviet Union produces and uses foam plastic sheets based on thermoplastic and thermosetting polymers of rigid, elastic, foamy, and porous structure. Fifteen such plastics including some of their specifications and applications are listed. There are no bibliographies but the authors cite Soviet and other authorities including A.A. Berlin, the author of Osnovy proizvodstva gazonapolnennykh plastmass i elastomerov (Principles of Production of Gas Filled Plastics and Elastomers) published by Goskhimizdat in 1954.

TABLE OF CONTENTS:

Card 2/8

S/081/62/000/002/100/107
B110/B101

AUTHORS: Kazakova, Z. I., Borodin, M. Ya.

TITLE: Gas formers for foam plastics

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1962, 569, abstract 2P48 (Sb. "Penoplastmassy". M., Oborongiz, 1960, 7 - 18)

TEXT: The application of gas formers in the production of foam plastics and methods of determining their foaming capacity are described. The characteristics of the most used inorganic and organic foam formers are mentioned. (18 references.) [Abstracter's note: Complete translation.]

Card 1/1

5.3300

77854
SOV/79-30 -5/78

AUTHORS: Kaplan, Ye. P., Kazakova, Z. I., Petrov, A. D.

TITLE: Synthesis and Properties of 4-Alkyl- and 4,4'-Dialkylbiphenyls and Their Hydrogenation Products of Composition C_{16}-C_{32}

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, pp 369-376 (USSR)

ABSTRACT: The authors synthesized 4-alkyl- and 4,4'-dialkylbiphenyls with the alkyl chains--C_4H_9, C_6H_{13}, C_7H_{15}, C_8H_7, and C_5H_{11}-$CH(C_3H_7)$-- by stepwise acylation of biphenyl with the butyryl chloride in nitrobenzene at -2 to -5° over $AlCl_3$ with subsequent reduction of the ketone (over amalgamated zinc). The 4,4'-bi-(decyl-4")-bicyclohexane was prepared by the scheme:

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Synthesis and Properties of 4-Alkyl- and 4,4'-Dialkylbiphenyls and Their Hydrogenation Products of Composition C_{16}-C_{32}

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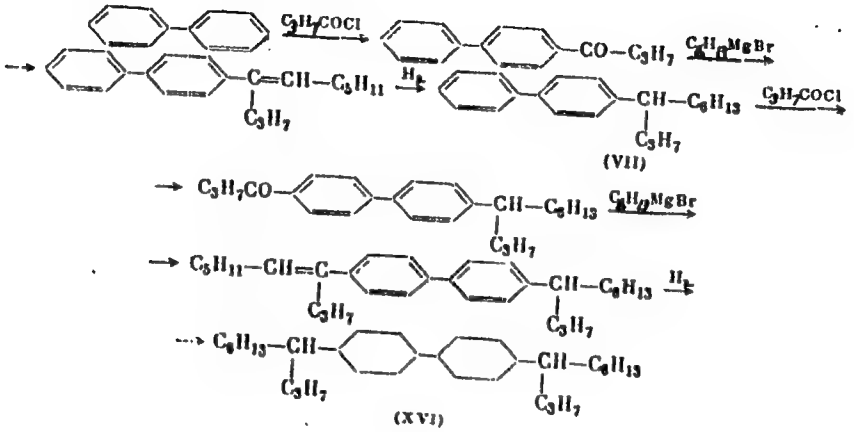
SOV/79-30-2-5/78



(VII)

(XVI)

Card 2/9

Synthesis and Properties of 4-Alkyl- and 4,4'-Dialkylbiphenyls and Their Hydrogenation Products of Composition C_{16}-C_{32}

77854
SOV/79-30-2-5/78

Hydrogenation of biphenyls was carried out over Raney Ni in solution of dimethylcyclohexane. Table 2 lists some of the synthesized monoalkyl- and dialkylbiphenyls (and respective bicyclohexanes) and their properties. Viscosity of the biphenyls as a function of temperature is shown in Figs. 1 and 2, while Figs. 3, 4, and 5 give infrared spectra (taken by V. A. Shlyapochnikov on the IKS-12 spectrophotometer with a NaCl prism) for some of the biphenyls and for the bicyclohexyls. There are 5 figures; 3 tables; and 6 references, 3 Soviet, 1 Japanese, 1 German, 1 U.K. The U.K. references is: P. Everitt, D. Hall, E. E. Turner, J. Chem. Soc., 1956, 2286.

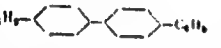
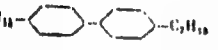
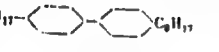
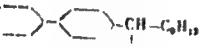
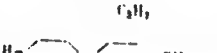
ASSOCIATION: Institute of Organic Chemistry of the Academy of Sciences, USSR (Institut organicheskoy khimii Akademii nauk SSSR)

SUBMITTED: February 4, 1959

Card 3/9

Card 4/9

Key to Table 2: (1) Nr of compound; (2) hydrocarbons of 4-mono- and 4,4'-dialkylbicyclohexyl series; (3) temperature; (4) of boiling (pressure in mm); (5) of solidification (6) calculated; (7) found; (8) viscosity (in stokes; (9) empirical formula.

1	2	3		d_4^{20}	n_D^{20}	MR_D		8				7 (%)		9	6 (%)	
		4	5			6	7	30°	50°	100°	150°	C	H		C	H
(IX)		130° (3)	−52°	0.8789	1.4780	71.69	71.83	0.1065	0.0440	0.0168	0.0113	86.30, 86.46	13.54, 13.50	$C_{16}H_{30}$	86.40	13.59
(X)		186—18 (9)	−3—10	0.8764	1.4783	80.93	80.94	0.1661	0.0619	0.0237	0.0127	86.28, 86.37	13.61, 13.61	$C_{19}H_{34}$	86.31	13.84
(XI)		190—193 (5)	−12	0.8718	1.4770	90.16	90.25	0.2210	0.0795	0.0289	0.2726	86.28, 86.07	13.68, 13.87	$C_{22}H_{38}$	86.25	13.84
(XII)	C_5H_{11}- 	170—172 (3)	−7	0.8721	1.4775	90.16	90.32	0.2726	0.0932	0.0284	0.0142	86.11, 86.13	13.85, 13.19	$C_{22}H_{38}$	86.25	13.75
(XIII)	C_7H_{15}- 	205—206 (5)	−10	0.8756	1.4785	117.85	117.51	0.6614	0.1936	0.0495	0.0216	85.18, 85.36	13.92, 13.63	$C_{26}H_{46}$	86.05	13.88
(XIV)	C_9H_{19}- 	240—242 (5)	−1	0.8709	1.4785	127.1	127.12	0.6082	0.1952	0.0511	0.0232	85.93, 85.83	13.87, 13.93	$C_{30}H_{54}$	86.08	13.94
(XV)		195—196 (3)	−35 glass	0.8774	1.4810	99.73	99.24	0.6958	0.1661	0.0397	0.0185	86.23, 86.30	13.82, 13.90	$C_{23}H_{42}$	85.19	13.87
(XVI)		240—242 (2)	−18 glass	0.8799	1.4820	145.5	145.1					86.04, 86.22	13.85, 13.91	$C_{38}H_{66}$	86.01	13.88

Synthesis and Properties of 4-Alkyl- and 4-4'-Dialkylbiphenyls and Their Hydrogenation Products of Composition C_{16}-C_{32}

77854
SOV/79-30-2-5/78

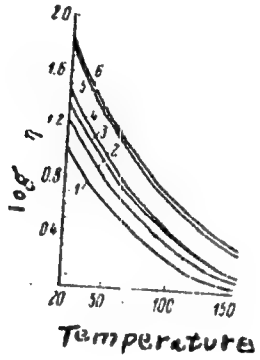
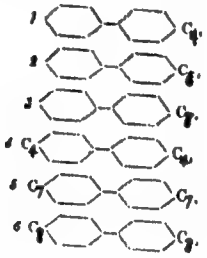


Fig. 1. Viscosity of hydrocarbons containing straight-chain alkyl radicals.



Card 5/9

Synthesis and Properties of 4-Alkyl- and 4-4'-Dialkylbiphenyls and Their Hydrogenation Products of Composition C_{16}-C_{32}

77854
SOV/79-30-2-5/78

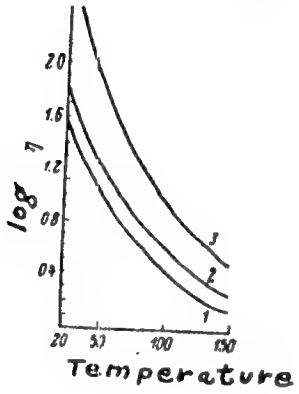
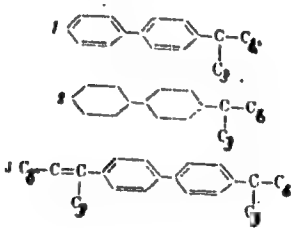


Fig. 2. Viscosity of hydrocarbons containing branched-chain alkyl radicals.



Card 6/9

Synthesis and Properties of 4-Alkyl- and 4-4'-Dialkylbiphenyls and Their Hydrogenation Products of Composition C_{16}-C_{32}

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SOV/79-30-2-5/78

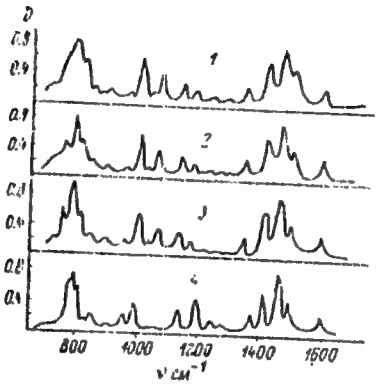


Fig. 3. Infrared spectra of alkylbiphenyls.

Card 7/9

Synthesis and Properties of 4-Alkyl- and 4-4'-Dialkylbiphenyls and Their Hydrogenation Products of Composition C_{16}-C_{32}

77854
SOV/79-30-2-5/78

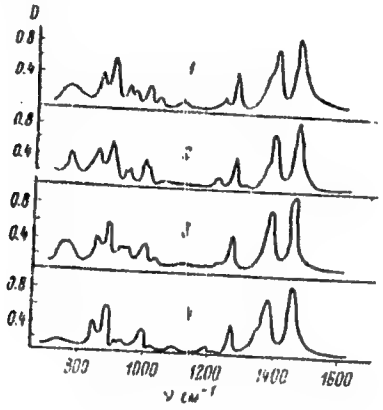
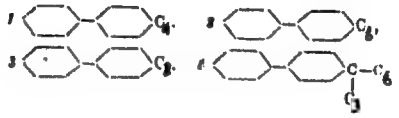


Fig. 4. Infrared spectra of alkylbicyclohexyls.



Card 8/9

Synthesis and Properties of 4-Alkyl- and 4-4'-Dialkylbiphenyls and Their Hydrogenation Products of Composition C_{16}-C_{32}

77854
SOV/79-30-2-5/78

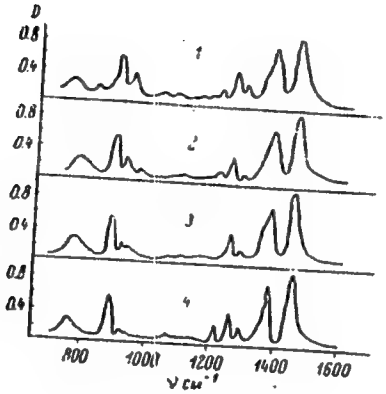
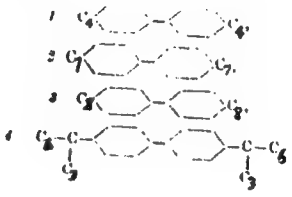


Fig. 5. Infrared spectra of dialkylbicyclohexyls.



Card 9/9

S/020/61/137/003/019/030
B103/B208

AUTHORS: Kaplan, Ye. P., Kazakova, Z. I. and Petrov, A. D., Corresponding Member

TITLE: Order of addition of lithium to diphenyl

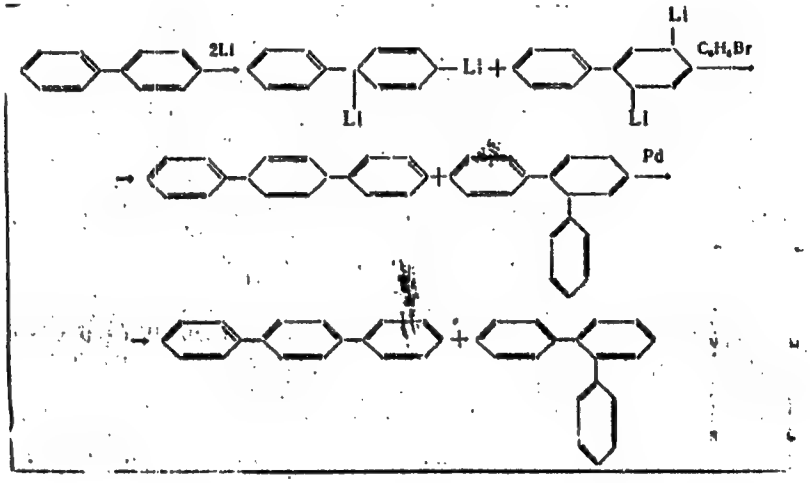
PERIODICAL: Doklady Akademii nauk SSSR, v. 137, no. 3, 1961, 606-608

TEXT: The authors determine the point of addition of lithium to diphenyl, as the most probable position of alkyl substituents in alkyl dihydrodiphenyls has not been clarified as yet. The positions 1,4 and 2,5 were indicated in publications. The authors used two methods: 1) oxidation of dihydrodiphenyl by SeO_2, and 2) condensation of dilithium dihydrodiphenyl with bromo-benzene, giving terphenyls which are easily identified. Ad 1): The attempt failed, as the expected products (phenyl cyclohexadienone, phenyl quinone) did not result, but a reduction of dihydrodiphenyl to diphenyl occurred. Ad 2): Condensation in ethereal medium and dehydrogenation of the reaction product on Pd-on-carbon gave a mixture of terphenyls. The authors isolated therefrom o- and p-terphenyl

S/020/61/137/003/019/030
B103/B208

Order of addition of lithium ...

by their methods (Ref. 6: ZhPKh, 33, 1207, 1960).



Card 2/3

m-terphenyl could not be obtained. o- or p-isomer predominates, depending on the reaction temperature. 50% of o-terphenyl and more than 50% of the p-isomer are formed at 30°C and 0°C, respectively. Ye. D. Lubuzh determined the infrared spectra for which she is thanked. The UR-10 device was used for this purpose. The bands detected were assigned to the p- and o-isomers. In conclusion, the authors state that lithium may be added to diphenyl both in 1,4- and 2,5-position. The p-isomer possibly results from isomerization of the o-isomer. There are 7 references: 4 Soviet-bloc and 3 non-Soviet-bloc. The reference to the English-language publication reads as follows: G. M. Bedger, J. Am. Chem. Soc., 69, 764 (1947).

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskiy of the Academy of Sciences USSR)

SUBMITTED: December 21, 1960

POPOV, V.A.; MOISEYEV, A.A.; BORODIN, M.Ya.; KONDRAT'YEVA, V.A.; GORSKIY, K.P.; KAZAKOVA, Z.I.; TROYAN, G.V.; DURASOVA, T.F.;

[Foam plastics and porous plastics] Penoplasty i poroplasty. Moskva, Goskhimizdat, 1962. 30 p. (MIRA 16:8)

1. Moscow. Vystavka dostizheniy narodnogo khozyaystva SSSR. (Plastics)

38590

S/081/62/000/010/073/085
B166/B144

15.8170

AUTHORS: Borodin, M. Ya., Kazakova, Z. I.

TITLE: Organosilicon foam plastics

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1962, 603, abstract 10P59 (Sb. "Penoplastmassy". M., Oborongiz, 1960, 157-166)

TEXT: A foam plastic type K-40 (K-40) has been developed on the basis of type K-40A (K-40A) silicon resin (softening point 60-80°C, gelation time at 200°C 5-30 min, volatile content in 3 hours at 150°C ≤1%). A mixture of azo-bis-isobutyro nitrile (porophor N) and amino guanidine-bis-carbonate (AG) was used as a porophor. Foaming of the composition in the mold at 90-100°C was followed by further heating at 150°C (3 hours) and 250°C (24-48 hours). When the material is fully cured the shrinkage amounts to 2.5-3%. K-40 foam plastic is stable at high temperatures and can withstand a temperature drop of 150°C. The introduction of 12 parts by weight ПАК-4 (PAK-4) aluminum powder into the foam plastic allows of increasing this temperature difference to 250°C. After the plastic has been heat-treated for a long time at 400°C (6 hours) and 500°C (2 hours) the linear

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dimensions of the specimens are reduced by 16-18%, the weight losses amount to 20-25%, and the volume weight is increased. Such specimens do not vary in strength when heated from 20 to 400°C. The K-40 foam plastic swells in organic nonpolar and weakly polar solvents. This plastic is noncombustible. The cured foam plastic does not cause corrosion of nonferrous or ferrous metals. It is easily worked with cutting tools, and can be sawn and planed. It can be cemented. K-40 is recommended for use in structures intended for radio engineering and heat-insulating purposes working at 200-250°C for up to 500 hours and at 300-350°C for up to 50 hours. [Abstracter's note: Complete translation.]

Card 2/2

PETROV, A. D.; KAPLAN, Ye. P.; KAZAKOVA, Z. I.; LUBUZH, Ye. D.

Synthesis of o-alkyl and o-aryl biphenyls. Izv. AN SSSR. Otd. khim. nauk no.1:161-166 '63. (MIRA 16:1)

1. Institut organicheskoy khimii im. N. D. Zelinskogo AN SSSR.

(Biphenyl)

KRASHENINNIKOV, S.K.; SHIFMAN, V.S.; KAZAKOVA, Z.I.

The KhV-1 chromatograph made of standard units. Biul.tekh.-ekon. inform.Gos.nauch.-issl.inst.nauch.i tekh.inform. 17 no.7:41-42 Jl '64. (MIRA 17:10)

L 23511-65 EWT(m)/EPF(c)/EPR/EWP(j) Po-4/Pr-4/Ps-4/Pi-4 RPL WW/
JW/RM

ACCESSION NR: AP4047127 S/0080/64/037/010/2283/2286

AUTHOR: Kaplan, Ye. P.; Kazakova, Z. I.; Sevast'yanov, Yu. G.; Smirnov-Averini, A. P.; Petrov, A. D.

TITLE: Preparation and properties of isopropylterphenyl

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 10, 1964, 2283-2286

TOPIC TAGS: isopropylterphenyl, synthesis, preparation, property, diisopropylterphenyl, heat transfer agent, thermal stability, radiation stability, isomerization

ABSTRACT: The preparation of isopropylterphenyl by alkylation and its isomerization under alkylation conditions were investigated, as well as its thermal, radiation and viscosity properties. Alkylation of terphenyl with isopropyl chloride using $AlCl_3$ catalyst in hexane solution at 0-25C gave mono-tetra isopropylterphenyls. The monoisopropylterphenyl yield was optimum with reactant terphenyl: isopropyl chloride:$AlCl_3$ ratio of 1:2:0.5; diisopropylterphenyl was maximum with a 1:4:1 ratio. Isomerization depended on catalyst (no isomerization with H_3PO_4)

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L 23511-65

ACCESSION NR: AP4047127

0

and temperature (isomerization with $AlCl_3$ catalyst increased with temperature). Isopropylterphenyl has high radiation and thermal stability. It can be used as a heat transfer agent in the 300-390C temperature range. Its higher boiling temperature and smaller decomposition in comparison to isopropyldiphenyl [illegible] more promising for this application. Orig. art. has 4 tables and [illegible]

ASSOCIATION: None

SUBMITTED: 02Sep63 ENCL: 00

SUB CODE: OC, GC NO REF SOV: 003 OTHER: 007

Card 2/2

[redacted]

[redacted] and the properties of [redacted]phenyl. Chem. [redacted] 37 no.2[redacted] 6 '64.

(MIRA 17:11)

KAPLAN, Ya.P.; KAZAKOVA, Z.I.; PETROV, A.D. [deceased]

Interaction of lithium adduct of benzene with tert-C_4H_9Cl and n-C_4H_9Cl. Izv. AN SSSR. Ser. khim. no.3:537-538 '65. (MIRA 18:5)

1. Institut organicheskoy khimii im. N.D.Zelinskogo AN SSSR.

KAZAKOVA, Z. S. Cand. Tech. Sci.

Dissertation: "On the Synthesis of Acyl-Oxythionaphthenes and Their Application for Dyeing and Printing of Thioindigo Fabric." Moscow Textile Inst, 29 May 47.

SO: Vechernyaya Moskva, May, 1947 (Project #17836)

KAZAKOVA, Z. S.

USSR/Chemistry - Naphthenes Sep/Oct 48
Chemistry - Synthesis

"Derivatives of 3-Oxythionaphthene," V. M. Rodionov, B. M. Bogoslovskiy, Z. S. Kazakova, Moscow Textile Inst, 11 pp

"Iz Ak Nauk SSSR, Otdel Khim Nauk" NO 5

States results of investigating 2-acetyl-3oxithionaphthene, 2-benzoyl-3-oxithionaphthene and 2-formyl-3-oxithionaphthene, Shows new method of synthesizing them, proceeding from thio-or dithiosalicylic acid. Shows the synthesis of a number of their derivatives. Submitted 25 Dec 47.

PA 27749T34

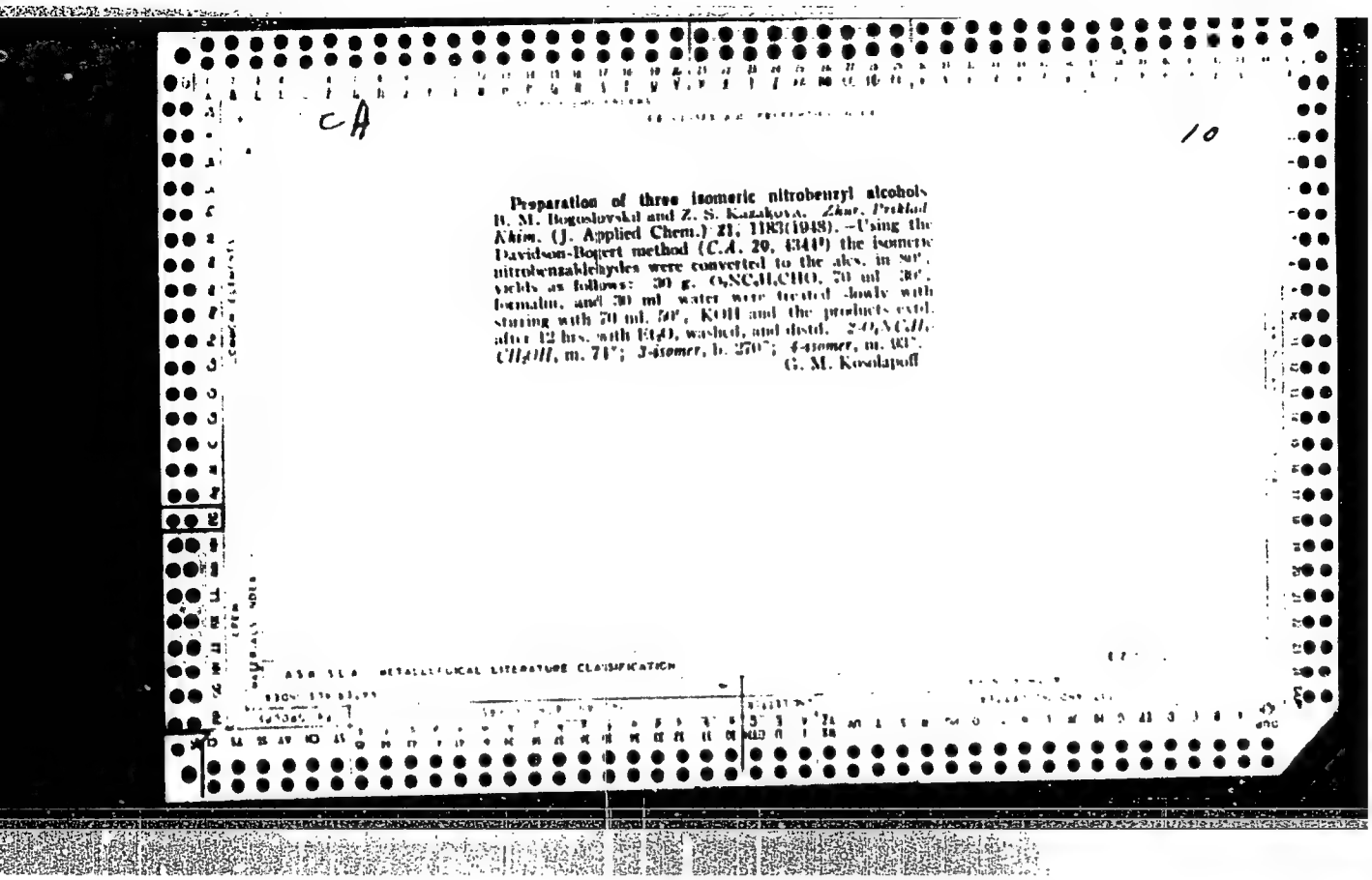
KAZAKOVA, Z. S.

Rodionov, V. M., Bogoslovskii, B. M. and Kazakova, Z. S., Obtaining and investigation of azo dyes, derivatives of 3-oxythionaphthlene. p. 262

Some azo dyes of the series 3-oxythionaphthlene have change of color at transition from acid to base and back; it is shown that they can be interesting indicators in acidimetry.

Lab. of Chemistry of Dyes of the Moscow Textile Institute.
January 9, 1948

SO: Journal of Applied Chemistry (USSR) 21, No. 3 (1948)



CA

10

Preparation of three isomeric nitrobenzyl alcohols B. M. Bogoslovskaĭ and Z. S. Kazakova. *Zhur. Prikład Khim.* (J. Applied Chem.) **21**, 1183(1948).—Using the Davidson-Bogert method (*C.A.* **20**, 4344[9]) the isomeric nitrobenzaldehydes were converted to the alcs. in 80% yields as follows: 30 g. $O_2NC_6H_4CHO$, 70 ml. 30% formalin, and 30 ml. water were treated slowly with stirring with 70 ml. 50% KOH and the products extd. after 12 hrs. with Et_2O, washed, and distd. *2-*, $O_2NC_6H_4CH_2OH$, m. 71°; *3-isomer*, b. 250°; *4-isomer*, m. 93°.

G. M. Kosolapoff

[illegible]

V. M. Fedicnev, P. M. Pogrebovskii and Z. S. Kozakova, On the derivatives of 3-oxy-thio-naphthene. II. 2-(nitro-phenyl)-3-oxy-thio-naphthenes. [illegible] 1947.

Three isomeric 2-nitro-benzyl derivatives of thio-salicylic acid were made and studied. It is shown that only the 4-nitro-benzyl derivative is capable of ring closure with formation of 2-(4-nitro-benzyl)-3-oxy-thio-naphthene. The negative results for the 2-nitro-benzyl derivative can be explained by steric hindrance and for the case of the 3-nitro-benzyl derivative the cause may be the absence of the resonance influence of the nitro group included from the conjugate system.

Lab. of the Chemistry of Dyes
Moscow Textile Institute
December 25, 1947

SO: Journal of General Chemistry (USSR) 28, (80) No. 11 (1948)

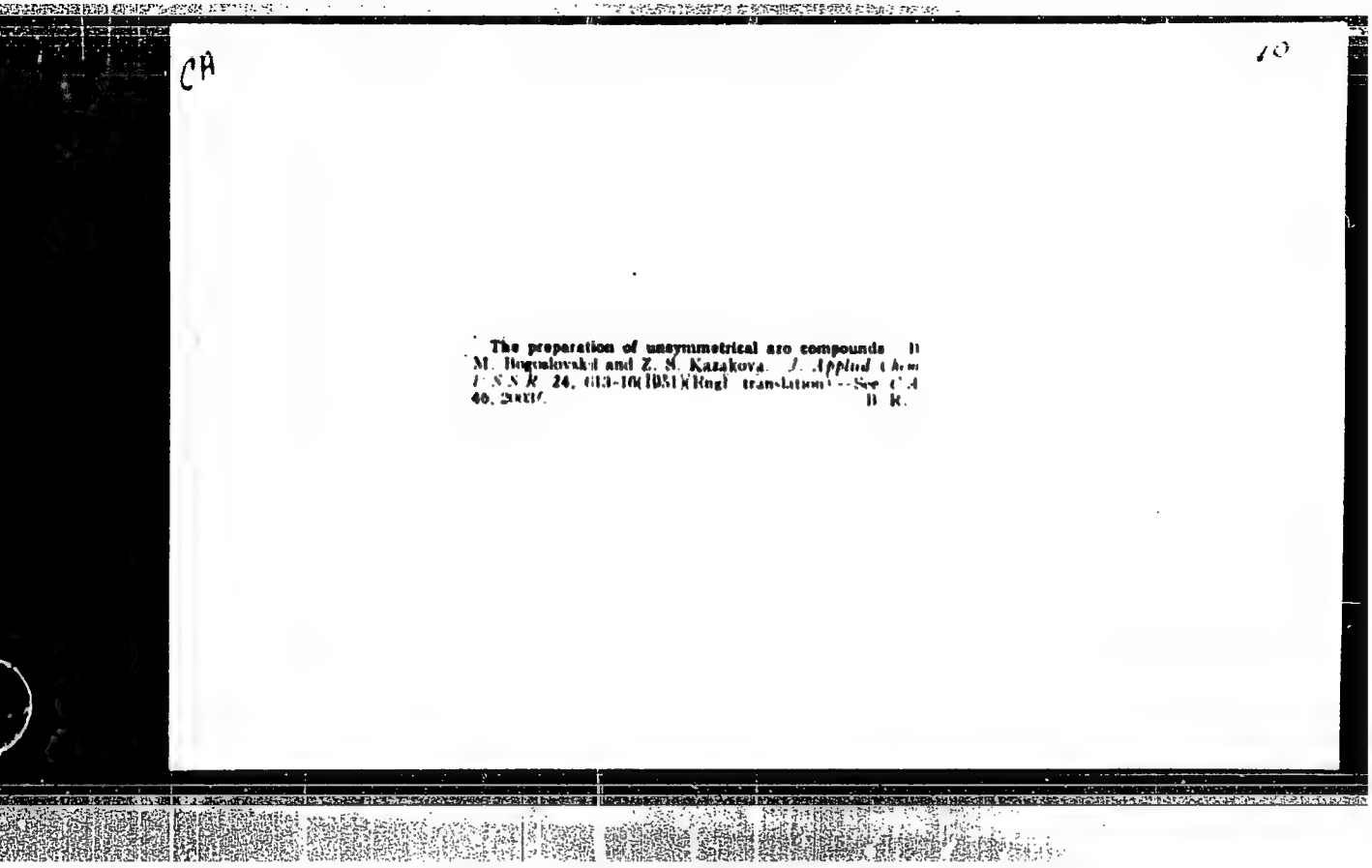
KAZAKOVA, Z. S.

V. P. Redinov, B. V. Bogoslovskii, and Z. S. Kazakova, On the derivatives of 3-oxy-thionaphthene. III. On the question of obtaining 2-methyl-3-oxy-thionaphthene. p. 1901.

The attempt to obtain 2-methyl-3-oxy-thionaphthene starting with semi-carbazone of 2-formyl-3-oxy-thionaphthene on the Kishner reaction was unsuccessful, just as the attempt to obtain it from (Y-methyl)-phenyl-thio-glycol-carbonic acid, because of the great instability of 2-methyl-3-oxy-thionaphthene, and its tendency to form resins. Its acetyl derivative, 2-methyl-3-aceto-oxy-naphthene, was made and studied.

Lab. of the Chemistry of Dyes
Moscow Textile Institute
December 25, 1947

SO: Journal of General Chemistry (USSR) 28, (80) No. 11 (1943)



CA

10

The preparation of unsymmetrical azo compounds. II
M. Bogomolovskii and Z. S. Kazakova. *J. Applied Chem. U.S.S.R.* 24, 613-16(1951)(Engl. translation).—See *C.A.* 46, 2811f. H. K.

BOGOSLOVSKIY, B.M.; KAZAKOVA, Z.S.

Preparation of symmetrically constituted dibromo-, dinitro-, and some dihydroxynaphthalenes. Zhur. Obshchey Khim. 22, 1183-6 '52. (MLRA 5:8)
(CA 47 no.13:6388 '53)

1. Moscow Textile Inst.

KAZAKOVA, Z. S.

Chemical Abst.
Vol. 48 No. 5
Mar. 10, 1954
Organic Chemistry

Preparation of symmetrically constituted dibromo-, dinitro-, and dihydroxynaphthalenes. B. M. Bogoslovskii and Z. S. Kazakova (Moscow Textile Inst.). *J. Gen. Chem. U.S.S.R.* 22, 1231-3(1952)(Engl. translation).—See *C.A.* 47, 03884.
H. J. H.

MF 1-28-54

1. BOGOSLOVSKIY, B. M., KAZAKOVA, Z. S., LEVINSKIY, F. .

2. USSR (600)

4. Dyes and Dyeing - Wool

7. Synthesis and investigation of compounds for dyeing wool according to the ice type. Zhur. prikl. khim. 25, no. 11, 1952.

9. Monthly List of Russian Accessions, Library of Congress. February 1953, Unclassified.

KAZAKOVA, Z. S.

Fading of azo dyes. B. M. Borovkovskii, Z. S. Kazakova, and M. M. Shemyakin. *J. Appl. Chem. U.S.S.R.* 26, 399–401 (1953) (Engl. translation).—See *C.A.* 47, 9817h.
H. L. H.

BOGOSLOVSKIY, B.M.; KAZAKOVA, Z.S.; SHEMYAKIN, M.M.

Fading of azo dyes. Zhur. Prikład. Khim. 26, 435-8 '53. (MLRA 6:4)
(CA 47 no.18:9617 '53)

1. Moscow Textile Inst.

Kazakova, Z. S.

BOGOSLOVSKIY, B.M.; KAZAKOVA, Z.S.; FABRICHNYY, B.P., redaktor; SHEMASTINA, Ye.V., redaktor; LYR'YE, M.S., tekhni[illegible]skiy redaktor.

[Skeleton catalysts, their characteristics and use in organic chemistry] Skeletnye katalizatory, ikh svoistva i primenenie v organicheskoi khimii. Moskva, Gos.nauchno-tekhn.izd-vo khim. lit-ry, 1957. 143 p. (MIRA 10:11)
(Catalysts)

89989

S/190/61/003/003/004/014
B101/B204

15.8112

AUTHORS: Parini, V. P., Kazakova, Z. S., Okorokova, M. N., Berlin, A. A.

TITLE: Polymers with a system of conjugate bonds and hetero-atoms in the conjunction chain. XII. Synthesis and properties of several polyaminoquinones

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 3, 1961, 402-407

TEXT: A. A. Berlin and N. G. Matveyeva (Ref. 1: Vysokomolek. soyed., 1, 1643, 1959) described the formation of polyaminochloroquinones by reactions between diamines and chloranil. These compounds have a positive magnetic susceptibility and the properties of electron exchangers. The present paper describes a study of the formation of polyaminoquinones by means of reactions between diamines and non-substituted quinones. The reactions were made with p-phenylene diamine (reaction product I), benzidine (II), benzidine-3-3'-dicarboxylic acid (III), and hexamethylene diamine. The diamines dissolved in alcohol or the acid dissolved in

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Polymers with a system...

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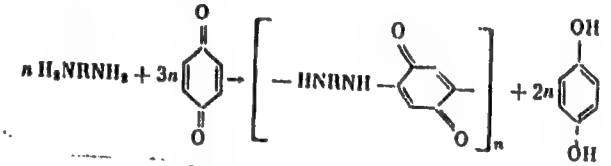
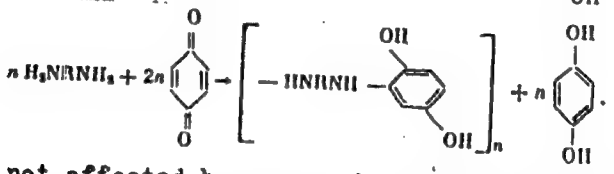
aqueous-alcoholic solution of NaOH were added to boiling quinone. The resulting precipitate was filtered off after 24 hr, treated for several times with hot alcohol, 5% NaOH, and 5% HCl, and was finally rinsed with water, alcohol, and ether. On the basis of the polymer yield and of the quantities of hydroquinones that had formed, it was concluded that only the first of the two possible reactions



(1)

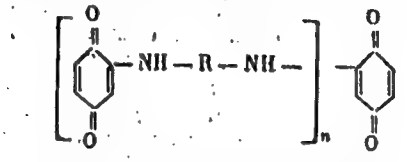
and



(2)

takes place, and that it is not affected by excess diamine. Therefore, further experiments were made with a ratio diamine/quinone = 1/3. On the

basis of data from elementary analysis and of the chemical behavior of the polymers which indicates quinone terminal groups, the following formula is assumed:



where R = $(CH_2)_6$; C_6H_4; $C_{12}H_8$; $C_{12}H_6(COOH)_2$. A degree of polymerization of 5 - 10, and thus a molecular weight of 1000 - 3000 followed from the ratio N/C. The substances I - III are dark brown powders. They form blue or violet solutions in concentrated H_2SO_4 and are partially soluble in quinoline, and only slightly soluble in other organic solvents. III gives a brown solution in dimethyl formamide and alkali. Hard films were obtained from this solution. III dissolved in dimethyl formamide forms a black precipitate with copper acetate which probably has a cross-linked chelate structure. Benzidine dicarboxylic acid dissolved in dimethyl formamide

Card 3/6

89989
S/190/61/003/003/004/014
B101/B204

was caused to react with quinone in order to obtain polymers of higher molecular weight. The result were black substances. The reduced viscosity of III dissolved in dimethyl formamide showed an anomaly. (Fig. 1). The substances I - III have electron exchanger properties. They may be partially reduced and are oxidized again by atmospheric oxygen. The fact that they can be reduced only difficultly, and the epr spectrum observed lead to the conclusion that the conjunction of the bonds is not interrupted by the imino group between the benzene rings. These substances have a positive magnetic susceptibility, are highly refractory (loss in weight after 1 hr of heating at 350°C 10.5 - 11%, after one further hour at 450°C about 5%), and are not combustible. Their conductivity obeys the law for semiconductors: $\sigma = \sigma_0 \exp(-E/kT)$. The following was found:

Polymer	E, ev	σ_o, ohm^{-1}.cm^{-1},	$\sigma_{20°}$, ohm^{-1}.cm^{-1}
I	0.9	30	10^{-15}
II	1.0	30	10^{-16}
III	0.4	2.10^{-3}	10^{-10}

According to these data, III has semiconductor properties. The possibility of a partial semiquinone structure is discussed. The reaction product

Polymers with a system...

S/190/61/003/003/004/014
B101/B204

of quinone and hexamethylene diamine, a brown, elastic, easily combustible substance, was not examined in detail. There are 2 figures, 3 tables, and 10 references: 6 Soviet-bloc and 4 non-Soviet-bloc. The 3 references to English-language publications read as follows: H. G. Cassidy, J. Amer. Chem. Soc., 71, 402, 1949; H. G. Cassidy, J. H. Updergraff, ibid. 71, 407, 1949; D. Bijl, H. Kainer, A. C. Rose-Innes, Nature, 174, 830, 1954.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR
(Institute of Chemical Physics, AS USSR).
Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti (All-Union Correspondence Institute of Textile and Light Industry)

SUBMITTED: July 5, 1960

Card 5/6

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Polymers with a system...

S/190/61/003/003/004/014
B101/B204

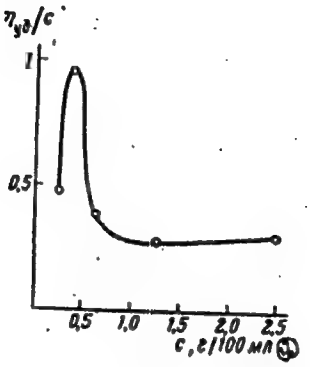

Рис. 1

Legend to Fig. 1:
a) g/100 ml

Card 6/6

PARINI, V.P.; KAZAKOVA, Z.S.; OKOROKOVA, M.N.; BERLIN, A.A.

Polymers with a conjugated system of bonds and heteroatoms in the conjugation chain. Part 12: Preparation and properties of some polyaminoquinones. Vysokom.soed. 3 no.3:402-407 Mr '61. (MIRA 14:6)

1. Institut khimicheskoy fiziki AN SSSR i Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti.
(Quinone) (Polymerization)

S/190/61/003/012/012/012
B110/B147

AUTHORS: Parini, V. P., Kazakova, Z. S., Berlin, A. A.

TITLE: Polymers with conjugate bonds and heteroatoms in the conjugate chain. XIX. Some properties of aniline black

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 12, 1961, 1870 - 1873

TEXT: The formulas for aniline black by A. G. Green (Ber., 46, 33, 1913) have been doubted by I. S. Ioffe and Ye. M. Metrikina (Ref. 2: ZhRFKhO, 62, 1101, 1115). Aniline black probably consists of polymers or oligomers with repeated quinone diimine groupings. V. P. Parini found a connection between the energy of the lowest unfilled level, the activation energy of conductivity, and other properties of aromatics having a benzene ring and accumulation of quinoid rings in the molecule. In quinone diimine groupings with nitrogen atoms unsaturated with respect to coordination, the molecule should be excited even more easily. According to

S/190/61/003/012/012/012
B110/B147

Polymers with conjugate bonds ...

A. G. Green and W. Johnson, 16 g of aniline, 48 milliliters of 31% HCl were dissolved in 200 milliliters of H_2O, and mixed with a solution of 24 g of $K_2Cr_2O_7$ in 600 milliliters of H_2O. After 1 hr, this solution was heated to 70°C and sucked off. The lye was obtained by boiling with NH_3. The complex-bound chromium was removed by treating with HCl (1.19) at 40 and 80°C, dissociating of hydrochloride by aqueous NH_3, dissolving in acetic acid, and washing with 2% NaCl solution. The authors found 14.22% of N in the lye (Green: 13.85%). In hydrochloride, they found 12.90% of N and 6.83% of Cl, which well agreed with Green's data. The results, however, contradicted the formula for aniline black given in the literature. The authors studied: (1) the substance obtained at first and not extracted with alcohol; (2) Cr-containing hydrochloride obtained after alcoholic extraction; (3) the corresponding lye; (4) the hydrochloride obtained after Cr removal and reprecipitation from acetic acid; (5) the lye obtained therefrom. The magnetic properties were examined by X-ray spectroscopy (wavelength = 3.2 cm). All samples showed a wide epr line(~450 oersteds)

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Polymers with conjugate bonds ...

corresponding to the epr spectrum of chromium oxide. This epr line had a narrow singlet (11 - 13 oersteds) having a g-factor of 2.00 and an integral intensity of 10^{19} - 10^{20} paramagnetic particles per 1 gram. Paramagnetic absorption decreased somewhat with Cr removal by HCl. After several hours' heating at 200°C, the wide line vanished in all samples, which proves its dependence on structure. The narrow epr signal was observed several times in conjugated bonds. Between 20 and 80°C, the electrical conductivity is subject to the equation for semiconductors, $\sigma = \sigma_0 \cdot \exp(-E/kT)$ (Table). In hydrochloride, it is essentially higher. At normal temperature and with a steep course of the curve $\sigma = f(T)$, low E and σ_0 values lead to conductivities comparatively high for organic substances. At 40°C, the sample not purified from low-molecular fractions by alcoholic extraction showed a salient point of the conductivity-versus-temperature curve and a sharp drop of activation energy and rise in conductivity. Catalytic activity was concluded from the magnetic and semiconductor properties. All samples, especially the hydrochlorides and the Cr-containing samples, catalyzed the

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Polymers with conjugate bonds ...

H_2O_2 decomposition, which is not done by chromium oxide. R. I. Yevgrafova is thanked for assistance with experiments, Ye. I. Balabanov for measuring the conductivity, V. L. Tal'roze for placing his laboratory at disposal. There are 1 figure, 1 table, and 9 references: 7 Soviet and 2 non-Soviet.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics AS USSR)

SUBMITTED: January 20, 1961

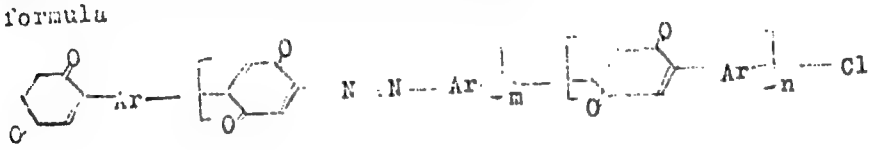
S/190/62/004/004/005/019
B119/B138

AUTHORS: Parini, V. P., Kazakova, Z. S., Okorokova, M. N., Berlin, A.A.

TITLE: Polymers with conjugate bonds and heteroatoms in the conjugate chain. XXII. Products of the reaction of bis-diazo compounds with quinones

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 4, 1962, 510-515

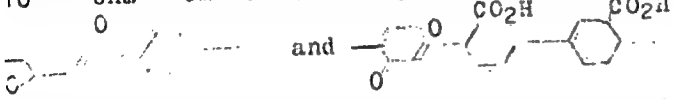
TEXT: The reaction of p-benzoquinone with bis-diazo compounds of p-phenylene diamine, benzidine, and benzidine-3,3'-dicarboxylic acid was studied. For each of the two latter compounds the reaction was conducted in two variants: (1) with neutralization of the released HCl by sodium acetate; (2) without neutralization. Five polymers of the proposed general formula



Card 1/3

Polymers with conjugate bonds and ...

were obtained (Ar is the aromatic group corresponding to the initial product). The compounds contain 5-15 benzene nuclei per molecule (estimated molecular weight 500-1500). The nitrogen content of the polymers, which depends on the acidity of the reaction medium, is 0.55 (with neutralization) to 11.6%. The compounds are heat resistant (3% loss of weight at 300°C) have electron exchange properties, and emit epr signals with an integral intensity of around 10^{18} - 10^{20} paramagnetic particles per gram. At 25°C the electrical conductivity is 10^{-10} to 10^{-20} $ohm^{-1} \cdot cm^{-1}$. The compounds with the fundamental molecules



react with heavy metal salts (solution in dimethyl formamide) to give insoluble compounds, probably with formation of cross-linked chelate structures. There are 1 figure and 2 tables. The most important English-language reference is: D. E. Kvalnes, J. Amer. Chem. Soc., 56, 2478,1934.

Card 2/3

PARINI, V.P.; KAZAKOVA, Z.S.; OKOROKOVA, M.N.; BERLIN, A.A.

Polymers with conjugate bonds and heteroatoms in the conjugate chain. Part 22: Products of the reaction between bis-diazo compounds and quinones. Vysokom.soed. 4 no.4:510-515 Ap '62. (MIRA 15:5)

1. Institut khimicheskoy fiziki AN SSSR i Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti.
(Diazo compounds)
(Quinones)

PARINI, V.P.; KAZAKOVA, Z.S.; BERLIN, A.A.

Polymers with conjugated bonds and heteroatoms in conjugated chains. Part 19: Some properties of aniline black. Vysokom.soed. 3 no.12: 1870-1873 D '61. (MIRA 15:3)

1. Institut khimicheskoy fiziki AN SSSR.
(Aniline) (Polymers)

PARINI, Vladimir Pavlovich; KAZAKOVA, Zoya Semenovna; BELEN'KIY, L.I., doktor tekhn. nauk, otv. red.

[Chemical palette] Palitra khimii. Moskva, Izd-vo "Nauka," 1964. 126 p. (MIRA 17:7)

ACCESSION NR: AP5009653 UR/0062/65/000/003/0419/0424

AUTHOR: Kazakova, Z. S.; Perlin, V. P.; Plogon'kiy, B. I.

TITLE: Aromatic nitrogen-containing polymers from quinonebischloroimide

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 3, 1965, 419-424

TOPIC TAGS: aromatic polymer, quinonebischloroimide polymer, azo group, [illegible]mer stability, infrared spectrum, electron spin resonance spectrum, polymer conductivity, polyazophenylene, polymer crosslinkage

ABSTRACT: The authors attempted to synthesize a polymer containing the maximum possible number of azo groups $-(-N=N-\langle\_\rangle-)_n$. To this end, the [illegible]ated p-benzoquinonebischloroimide with metallic potassium and [illegible] [illegible]molecular structure of [illegible] [illegible] [illegible] [illegible] ESR spectra and [illegible] polymers obtained, and also fractions of polyazophenylenes containing [illegible] amounts of nitrogen, showed that this polymer is close to the highest molecular fractions of polyazophenylene, which contain the maximum quantity of nitrogen.

Card 1/2

L 48974-65

ACCESSION NR: AP5009658

The cross-linking processes are thought to be due to rearrangements of the end groups of the polymer. "The authors thank Yu. Sh. Moshkovskiy and Ye. L. Frankevich for recording the IR spectra and measuring the electrical conductivity. Orig. art. has: 2 figures, 3 tables and 6 formulas.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences, SSSR); Vsesoyuznyy zaochnyy Institut tekstil'n. y i legkoy promyshlennosti (All-Union Correspondence Institute of the Textile and Light Industry)

SUBMITTED: 10Apr63 ENCL: 00 SUB CODE: OC

NO REF SOV: 007 OTHER: 001

Card 2/2

KAZAKOVICH, E.V., inzh.; TROFIMOV, D.P., inzh.

Effectiveness of using pipes in transporting concrete mixes into shafts. Shakht. stroi. 4 no. 6:20-23 Je '60. (MIRA 13:11)

1. Trest Krivbasshakhtoprokhodka.
(Shaft sinking) (Mine timbering)
(Concrete)

KAZAKOVICH, V. K.

KAZIMIROVA, V.F.; KAZAKOVICH, V.K.

Influence of salts on the solubility of medicinal plasmon preparations.
Trudy LTIKHP 7:71-72 '55. (MLRA 10:9)

1. Kafedra organicheskoy khimii.
(Albuminoids) (Materia medica, Animal)

S/194/61/000/002/024/039
D216/D302

16.8000

AUTHOR: Kazakovich, V.V.

TITLE: A study of non-linear processes in an extremum regulator

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 2, 1961, 36, abstract 2 V279 (V sb. Teoriya i primeneniye diskretn. avtomat. sistem, M., AN SSSR, 1960, 387-398)

TEXT: The direct Ritz-Galerkin method of variations is applied to the approximate determination of periodic states in extremum control systems where the process is described by one of the equations:

$$T_a \overset{o}{y} + y = - cx^2, \quad (1)$$

$$T\ddot{y} + T_a y + y = - cx^2, \quad (2)$$

$$M\overset{o}{y} + y + dy^2 + ey^3 + cx^2 = 0 \quad (3)$$

Card 1/2

S/194/61/000/002/024/039
D216/D302

A study of non-linear processes...

The graphs are given, which determine the oscillations parameters in accurate and approximate solutions together with the limits of applicability of approximate formulae. 1 reference.

Card 2/2

KAZAKOVSKIY, D. A.

The value of accuracy in connection with the geometrizing and calculation of the reserves of deposits. Moskva. Ugletekhizdat Ministerstva Zapadnoglia. 1948. 130 p. (49-26026)

TN272.K3

KAZAKOVSKIY, D. A.

Mine surveying and the geometrizing of mineral resources; textbook for mining institutes. Moskva, Ugletekhizdat, 1948. 201 p. (49-15815)

TN273.K3

KAZAKOVSKIY, D. A.

Kazakovskiy, D. A. "On the problem of surveyor's control of mining during coal deposit mining," Trudy Vsesoyuz. nauch.-issled. markscheyder. in-ta "VNIMI", symposium 16, 1948, p. 3-32

SO: U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949)

KAZAKOVSKIY, D. A.

Earth Pressure

Method of analogies in questions of rock displacement. /Trudy/ VNIIG, 22, 1950.

9. Monthly List of Russian Accessions, Library of Congress, October 1953, Uncl.

KAZAKOVSKIY, D.A., doktor tekhnicheskikh nauk.

The problem of preliminary estimates of the displacement of rock in the working of coal deposits. Trudy VNIMI no.25:3-11 '52. (MLRA 8:3)
(Subsidences (Earth movements))(Mine surveying)

KAZAKOVSKIY, D.A., professor, doktor tekhnicheskikh nauk.

Calculating surface deformations in removing steeply inclined and sloping seams. Trudy VNIMI no.26:21-32 '52. (MLRA 8:3)
(Subsidences (Earth movements))